

ORNITHOLOGICAL NOTES

MADE IN THE

STRAITS SETTLEMENTS

AND IN THE

WESTERN STATES OF THE MALAY PENINSULA.

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(Continued from Journal No. 11, p. 29, and concluded.)



GALLUS FERRUGINEUS (Gm.). The Jungle-fowl.

The common Jungle-fowl, the "Ayam-utan" of the Malays, is exceedingly plentiful throughout the Native States; but I never met with it on the island of Singapore, and it is not common, if, indeed, found at all, on Pulau Penang.

Whether or not the Malay species, Temminck's *G. bankiva*, is really distinct from the Indian, it is hard to say; but if it is distinct, both kinds are certainly found in the Malay countries; for, while stationed in Pêrak, I shot, out of the same tract of jungle, unmistakable specimens of *G. ferrugineus*, with the rich golden hackles and white ear-patches, also birds of far darker, in one case almost black, plumage. But the wild Jungle-fowl interbreed so much with domestic roosters from the villages, that I cannot help thinking these dark-coloured birds to be the results of such intercourse, particularly as many of them, though very unlike the typical *G. ferrugineus*, are not like one another, varying much in the intensity of their colouring.

In Pêrak I found Jungle-fowl breeding from March to July; and the young, when three or four weeks old, were capital eating—far better than the full-grown bird, which has but little more game flavour than the ordinary domestic fowl.

At the first glimmer of daylight, and again towards evening, the Jungle-cocks may be heard in all directions, crowing loudly, and by very careful stalking may occasionally be got at; but I found far the most successful plan was, either early in the morning, or else about sunset, to sneak quietly along the edges of clearings and patches of cultivation, which at those times the Jungle-fowl frequent in search of food; and in this way; by dodging from bush to bush, I frequently rendered a good account of them. But it required the most careful stalking, as on the slightest alarm the birds ran into the thick jungle, where it was almost useless to follow them. Once or twice I shot them in thick cover by letting my dog hunt them up into the trees, which they did not leave till I was within range.

In Province Wellesley the Malays decoy Jungle-fowl by imitating the crowing and flapping of the wings of the cock, when the birds coming to accept the supposed challenge are shot.

The following are descriptions of birds I shot near Kuâla Kangsa, Pêrak:—The cock, though in magnificent plumage, wanted the white ear-coverts; he was about 22 inches in length, tarsus 3 inches; irides orange; head and neck covered with long golden hackles, darkest on the head and nape; the back and long upper tail-coverts rich chestnut, the latter of a golden hue; primary and secondary wing-coverts black, glossed with metallic shades of purple and green; lesser coverts rich maroon; wing-quills dusky, with rufous margins to the outer webs; tail black, glossed with green; underparts dull black, with some of the feathers edged with brown.

The hen is of much plainer plumage. Upper parts brown, minutely freckled with a paler and more rufous shade of the same colour, with some of the feathers pale-shafted; the hackles are black, short, and edged with yellow; underparts pale rufous-brown; the feathers of the breast pale-shafted; length of bird about 15 inches.

GALLUS VARIUS (Shaw.).

In the Botanical Gardens at Singapore there was a specimen of this handsome Jungle-fowl; but probably it had been imported.

EXCALFACTORIA CHINENSIS (Linn.). The Blue-breasted Quail.

This tiny but most beautifully marked Quail swarms throughout the Malay States, being found in almost every dry paddy-field or tract of scrub and grass-covered ground. It is difficult to flush, not rising until almost trodden on; then, after skimming over the grass with a Partridge-like flight for fifty or sixty yards, it drops like a stone, and is hard to put up again, even with a dog.

The sudden way in which they drop to the ground frequently deceives the inexperienced sportsman, who, thinking he has made a successful shot, hurries to where the bird apparently fell, and makes a long and fruitless search, while the object of his pursuit is running as hard as it can lay legs to the ground to a distant part of the field.

They are very good eating, but so small as to be scarcely worth a charge of shot; and after being a few weeks in the country, and ceasing to look on them as a novelty, one seldom fires at them, confining one's attention to larger game, in the shape of Snipe, Plover, &c.

The sexes are very unlike in plumage, the male being by far the more handsome and brightly-coloured bird. One, shot near Sai-yong, Pêrak, on 24th April, was $5\frac{1}{4}$ inches long; irides deep crimson; legs bright orange; beak black; head and upper parts brown; feathers of the back pale-shafted, and banded, mostly on one web only, with black; wings pale brown, some of the coverts edged with rufous and bluish grey; forehead, cheeks, sides of neck, and breast bright bluish grey; moustache-streak and broad crescentic mark on throat pure white, bordered by a deep black line; chin and throat black; abdomen ruddy chestnut. The female is not nearly so boldly marked: one, shot at Singapore on 7th November, measured $5\frac{1}{4}$ inches in length, tarsus $\frac{3}{4}$ inch; legs orange; irides red-brown; supercilium, throat, and forehead rufous brown; chin dull white; breast dingy brown, with narrow black cross bars; feathers of flanks much lengthened; the white and black markings of the throat, also the chestnut abdomen of the male, were wanting.

ROLLULUS ROUROUL (Scop.). The Crested Partridge.

Though not rare, this bird is seldom seen, being very shy, and on the approach of danger trusting to its legs rather than taking flight. All my specimens were snared in the neighbourhood of Kuâla Kangsa.

Captain WARDLAW-RAMSAY tells me he found it plentiful round Mount Ophir; and I saw several skins in Malaccan collections. These birds thrive well in confinement, but are not easily tamed: some which were in my aviary for several months were always wild, hiding directly any one appeared in sight; but early in the morning, when all was quiet, and they thought they were not observed, they used to come out of their hiding-places and feed on rice and Indian corn.

The male is very handsome, with a crest of red plumes on its head; the female is without the crest, and of much duller colours than her mate.

RHIZOTHERA LONGIROSTRIS, (Temm.).

While stationed at Kuâla Kangsa, Pêrak, a Malay brought me one of these curious Pheasant-like birds, which he had snared, and I put it in my aviary; but it only lived a few weeks.

I also saw a couple in confinement, at Singapore, in Mr. WHAMPOA's garden; but he could not tell me anything about them, not even where they came from. They were about the size of a domestic hen, wings and tail short, legs whitish, tarsus spurred; irides dark brown; beak black, sharp, and very much curved; plumage rich brown, mottled and spotted with a darker shade of the same colour; at the base of the neck and on each side of it was a greyish-blue patch; feet and claws very large and powerful.

To a casual observer these birds look like the hens of some species of Pheasant. They are known among the Malays by the name of "Burong salantung."

TURNIX PLUMBIPES (Temm.). The Black-breasted Bustard-Quail.

For some time I put down this Bustard-Quail as Sykes's *T. tai-goor*; but apparently it is distinct from that species.

It is very plentiful throughout Western Malayana; but I rarely found more than two or three together; in fact, I generally flushed

them singly, and, as a rule, on ground covered with scrub or long grass. Like all the Quails, they are very difficult to put up, trusting to their legs more than their wings.

In my note-book I have written as follows:—

“ Kuâla Kangsa, Pêrak, 8th June, 1877.—To-day I shot a female specimen of the Malayan *Turnix*, almost identical with *T. taigoor* of SYKES: my bird measures $6\frac{1}{4}$ inches; irides yellowish white; bill and legs bluish lead-colour; it has but three toes; throat and upper part of breast black; under-parts and the wings rufous brown, barred on the wings and lower part of the breast with black; head and neck freckled with black and white spots: claws white; weight slightly over 2 oz.

“ When walking through the jungle I often flush these Quail. Small open patches appear to be their favourite resorts; and I very seldom find them in the paddy-fields, where the little *Excalfactoria chinensis* swarms.”

Among the “lalang” grass round the barracks at Singapore, Bustard-Quail were very common, breeding during May, June and July.

On 1st July I found a brood of five young ones running about with their mother among the flower-beds in the Botanical Gardens, and on 24th August disturbed a family of them in the long grass close outside our mess; they could not fly more than a few yards at a time, so were easily caught.

One I carefully examined, though fully feathered, could scarcely fly at all, but ran at a great pace, and showed much cleverness in hiding itself by crouching flat on the ground, taking advantage of any hole or depression; its irides were straw-colour, like those of the adult.

I used to see the Malays in Pêrak employ these birds as decoys to catch others of their kind, much in the same way as Dr. JERDON in his “Birds of India” describes it as being done by the natives in the south of India.

The decoy, usually a hen bird, is enclosed in a small wicker cage, having an arrangement by which, on the breaking of a thread which is stretched across the bars, a net springs over the front of the cage. This contrivance is placed in a likely spot in the jungle: and the

wild Quails, attracted by the "calling" of the decoy, try to get at it, and, fluttering against the outside of the bars, break the thread, set free the spring-net, and are caught.

Dr. JERDON says that in India all the birds thus caught are hens, as are the decoys: unfortunately I neglected to see if such was the case in Pêrak; but if so; it conclusively proves that it is not sexual desire, but their pugnacity, that is so fatal to them. The female is the larger and by far the more handsome bird of the two, the male wanting the deep-black throat and upper breast, and being altogether less boldly marked.

GLAREOLA ORIENTALIS (Blyth.).

The Swallow-Plover is very common during the seasons of migration, arriving at the same time as the Golden Plover, *Charadrius fulvus*; but I never met with it at other times of the year. During March, and again in September and October, great numbers pass over the island of Singapore; but they are then so tame that it is poor sport shooting them: often they squatted so closely that I walked within a few yards before they would rise; then they frequently settled again after flying a short distance. Perhaps this extraordinary tameness was owing to the fatigue occasioned by migrating. I noticed that they were generally found in large flocks on cultivated ground, and were particularly fond of ploughed land, more especially if it was on a hillside.

The vernal migration takes place early in the year; in my notebook is the following passage:—

"Kuâla Kangsa, Pêrak, 22nd February, 1877.—This afternoon I paddled down the Pêrak river in a canoe to Kampong Saiyong, accompanied by H—, on our way getting a Golden Plover out of a pair which were sitting on a sand-bank in the middle of the river.

"A little further on, on another sand-bank, we saw an enormous flock of birds, which every now and then rose with shrill cries, and after flying a few yards settled again, squatting flat on the sand. Not knowing what they were, we stalked them, and bagged six, losing three more, which fell into the river and were swept away.

"At first I took them to be the European Pratincole, but now see, as stated by JERDON, that they differ from that species in having the tail less forked; they must be migrating, as on no former

occasion have I seen any here; and their being in such numbers, and so easily approached, makes it still more probable that they are on passage. When fired at the big flock broke up into small parties of from ten to twenty; but after a short time they all returned to the sand-banks. While on the wing, flying close over the surface of the water, the most noticeable points about them were their Swallow-like wings and white rumps."

In plumage the sexes are alike; but immature birds which I shot in Singapore during September were not nearly so decidedly marked as the adults, moreover they were much mottled and freckled with brown. The pectinated middle claw, large eye, wide gape, their flight, and the way they crouch flat on the ground, all seem to point to a relationship between these birds and the Caprimulgidæ.

SQUATAROLA HELVETICA (Gm.). The Grey Plover.

Identical with the European species. The Grey Plover is common among the islands and along the coasts of the peninsula from October to March, but appears to breed further north. On 13th April, 1879, I had over a dozen brought to me, which had just been caught on the coast a few miles south of Malacca; and of these one showed considerable signs of the breeding-plumage, its breast being much blotched with black. During October, November and December, some may always be shot on the shores of Pulau Ubin, Pulau Nongsa, and the other rock-girt islands near Singapore; a female which I shot off Pulau Ubin was sitting on an isolated rock in company with a large flock of Ringed Plover (*Ægialitis geoffroyi*).

CHARADRIUS FULVUS (Gm.).

The Eastern Golden Plover is very plentiful during the north-east monsoon, but goes north in April to breed, returning again to the south of the peninsula towards the end of September. In Pêrak, during January and February, I found them in large flocks on the edges of all the jheels, particularly those in the neighbourhood of Kôta Lâma, Saiyong, and Sengan; but they got scarcer in March. The 8th April was the latest date on which I shot one, which, in company with another, was sitting on a sand-bank in the middle of the Pêrak river; it had almost fully assumed the black breast of the breeding-season. In 1879, while stationed at Singapore, as late as 13th April, a Malay fisherman brought me a large cage full

of Terns and shore-birds, which he had netted on the sands near the mouth of the Moar river ; and among them were several Golden Plovers, all in various stages of the breeding-plumage ; so probably they nest somewhere towards the north of the peninsula, though in Singapore and the south they are most certainly migratory.

In Singapore, though no very large bags were to be made, they often, during October, afforded me a capital afternoon's sport. In the neighbourhood of Tanglin the best places for them were the Chinamen's gardens and the cultivated hills near Cluny ; but there was also good ground near Changi, at Gaylang, and on the Trafalgar estate.

When shot at some distance inland they are very good eating ; but a coast diet spoils them for the table : some I shot on the sea-shore at Pěnâga, in Province Wellesley, were quite uneatable, having a strong, fishy, decayed-seaweed kind of flavour.

In my notes are many references to this species, among them the following :—

“Tanglin, Singapore, 2nd October.—Early this morning three Golden Plovers were running about our lawn-tennis ground, close to the public road ; they were very tame, allowing me within a few yards before they rose, and even then flying but a short distance. In the evening, at dusk, while several of us were playing tennis, laughing and talking, a Golden Plover circled round two or three times, then settled on the ground in our midst. I never saw one so tame, but believe it was migrating, and so tired as to be regardless of danger and glad to rest anywhere.”

ÆGIALITIS GEOFFROYI (Wagl.). The Sand-Plover.

Found in great numbers on the coasts of the peninsula during the north-east monsoon. Towards the end of November, 1879, I found enormous flocks of them at low tide on the shore of Pulau Batam ; they were then all in the brown-and-white winter plumage. One, which I shot out of a flock of *Charadriinæ* which rose from a rock in mid channel between Pulau Ubin and Singapore, was $8\frac{1}{2}$ inches in length ; irides dark brown ; beak at front $\frac{1}{2}$ inch ; legs black ; tarsus $1\frac{3}{8}$ inch ; upper parts and streak below the eye dull brown ; forehead, tip of tail, and the underparts white ; date 10th January.

The summer plumage is very different from that of the winter time. In my note-book I find the following notes concerning two specimens obtained alive from the Malacca coast on 13th April, 1879:—

“The two Sand-Plovers which were brought to me to-day differ much in appearance; both are *Æ. geoffroyi*. My identification has been confirmed by Mr. DAVISON; so there can be no mistake; but they are certainly very unlike one another, one being in the ordinary brown-and-white winter plumage, the other, a female, in the rufous colours of the breeding-season. This last, Mr. DAVISON tells me, is the only specimen in summer plumage that he has ever seen in these parts. The following is an accurate description of it:—

“Length $8\frac{1}{2}$ inches, bill at front 1, tarsus $1\frac{1}{2}$; bill black; irides dark brown; forehead, lores, ear-coverts, and streak below eyes black; spot on each side of forehead, the chin, throat, abdomen, margins of inner webs of the primaries, white; upper parts hair-brown, tinged with rufous, particularly on the head and neck; a broad band round the upper part of the breast bright rufous.”

ÆGIALITIS MONGOLICA (Pall.).

Frequents the coasts during the north-east monsoon. On 23rd November I shot one out of a flock on the shores of Pulau Batam, near Singapore. Length barely 8 inches, tarsus $1\frac{4}{10}$, beak at front $\frac{3}{4}$; upper parts dull brown, tinged, particularly on the wing-coverts, with rufous; the forehead and underparts white, with a rufous tinge, deepest on the breast. It is rather like, but smaller than, *Æ. geoffroyi*.

ÆGIALITIS DUBIA (Scop.).

On 23rd November, 1879, I shot a specimen of this small Ringed Plover out of a party of five on the sandy strand bordering Pulau Batam. At first I thought it was *Æ. minuta*; but that bird has the basal half of the beak yellow, while in this the whole of it is black.

I shot another during November on the parade-ground at Tanglin, Singapore.

LOBIVANELLUS ATRONUCHALIS (Blyth.).

The Red-wattled Lapwing is common in Pêrak and Lârut, frequenting the edges of jheels and the swampy valleys in the jungle. I never found a nest; but they probably breed in the peninsula, as

I saw a pair near Kuāla Kangsa, Pêrak, as late as the first week in May. Earlier in the year I shot several in the neighbourhood of that place, also some few at a jheel near Sengan, lower down the river.

In my notes is the following passage :—

“Singapore, 21st November, 1879. This afternoon I shot a few Snipe and Plover in the swampy valley behind our barracks, also put up two Red-wattled Lapwing, one of which I shot. It is exactly like those I used so often to get in Pêrak; but here it is a rather rare bird, and one seldom hears its plaintive cry, so well rendered in Dr. JERDON’S work by the words ‘Did he do it! Pity to dô it.’ A male, shot at Saiyong, Pêrak, on 13th April, measured about $12\frac{1}{2}$ inches in length, tarsus 3; beak red, black at its tip; orbits and wattles red; irides red-brown, legs yellow; head, neck, and breast deep black; ear-coverts, streak down each side of neck, band across upper part of the back, abdomen, and the tail white, the last broadly barred with black; upper parts and wing-coverts dull brown, glossed with metallic shades of purple and green; greater coverts broadly tipped with white; wing-quills black; the shoulder furnished with a short blunt spur; hind toe very minute. Its stomach contained vegetable matter and particles of quartz.”

STREPSILAS INTERPRES (Linn.). The Turnstone.

About the middle of April, 1877, a Malay brought me a cage of eighteen or twenty Turnstones, which he said he had netted on the sands near the mouth of the Moar river; they were in most beautiful plumage.

I saw large flocks of Turnstones scuttling about at the water’s edge on the beach at Pulau Nongsa during September, and shot one or two of them.

GALLINAGO STENURA (Temm.). The Pintail Snipe.

Although the European Snipe (*G. scolopacina*) is occasionally found, the one commonly met with in the Malay States is the Pintail Snipe (*G. stenura*), dozens (I think I may almost say hundreds) of it being obtained for one of the former. But in general appearance the two species are so alike that anybody not a naturalist, nor of a very inquiring nature, may easily shoot throughout a whole season in that land of the longbills, Province Wellesley, without

knowing that his spoil differs in the least from the well-known Snipe of the British Isles.

But if, while resting from his labours after a few hours' plodding through mud and water under the blazing sun of those parts, he will turn out his well-filled bag and carefully examine its contents, it will be found that, with hardly an exception, the birds are "Pintails."

The tait, instead of being of soft rounded feathers, as is the case with the English bird, has eight rigid pin-like feathers on either side, though I have seen specimens in which these stiff feathers were but seven in number. This is the most marked characteristic of the species, and at once determines the identity of a specimen: but the Pintail also has the axillary plumes more richly barred than its European brother—though, unless one had some of each kind laid side by side for comparison, the differences between the two species would probably pass unobserved.

It is only at a certain season that Snipe abound in the Malay peninsula: from May to July, both months inclusive, it is hard to find a single bird; but about the middle or end of August they begin to arrive in Province Wellesley and Pulau Penang, extending to Malacca and the extreme south of the peninsula, including Singapore, ten days or a fortnight later, though they are not found in great numbers in any of these places until later in September.

However, it is impossible to lay down a hard and fast rule, as the migration is much influenced by the weather; but it may safely be said that the great body of the Snipe do not come south until the commencement of the wet and stormy period which proclaims the breaking-up of the south-west monsoon.

Towards the end of April they return north to their breeding-grounds; and I doubt if any remain to nest in the peninsula, though in Pénak I have shot a few stragglers as late as the second week in May.

With reference to the habits of the Pintail, my experience is that, as a rule, they are not found in any number in the paddy-fields—that is to say, when the crops stand high; and though I once, at Pénâga, on November 6, 1877, in about three hours, bagged twenty-five couple on paddy-land, still it was the only occasion I am able

to record ; and then, I believe, their presence was due to the paddy being scattered about in patches and much mixed up with reeds and coarse herbage.

Their favourite ground is where the jungle has been burned, and the vegetation, just beginning to spring up, shows in green shoots above the blackened soil. Another sure finding-place is rough land, with bushes, small pools of water, and moist places scattered here and there ; but everywhere it will be found that during the intense heat of the day the Snipe avoid the open country, and seek shelter from the sun under thick bushes, or in the shade of high jungle. They then lie very close, and when flushed rise with a listless flight, not unfrequently settling again after flying eighty or a hundred yards ; but of course this is not the case in districts where they are much shot at and disturbed.

Though undoubtedly, as a rule, the Malay Snipe are not so wild nor so active on the wing as is the European species, still they afford excellent sport, and are by no means easy to shoot, particularly during the early morning, when, revived by the cool night air, they dart and twist along at a great pace ; also among bushes it requires very quick and straight shooting to make anything of a bag.

As soon as the sun gets low they leave the covert and scatter themselves all over the country in search of food ; often on moonlight nights, when out in the jungle after pig, on crossing open pieces of ground where, during the day, not a bird could be found, I have heard Snipe rise, squeaking on all sides. One most keen sportsman of my acquaintance sallied forth on one of these very bright nights ; but, though the Snipe swarmed, he returned without having done more than frighten them—not to be wondered at, considering how deceptive is the light of even the most brilliant tropical moon.

During droughts, when the ground is parched and cracked by the heat, the Snipe probe the buffalo-dung, perforating the heaps with thousands of small holes in their search after the worms which collect beneath.

I think that there can be little doubt that Province Wellesley, opposite the island of Penang, is by far the best Snipe-ground in

the peninsula, probably owing to its being extremely flat, well watered, cleared of jungle, and perhaps to its being very near the limit of the migration south. To a very great extent it is covered with paddy-fields; and on the rough uncultivated land bordering these the Snipe are extremely plentiful, enormous numbers often being shot in a day. One morning early in November, 1877, I bagged thirty-five couple by midday, and had quite as good sport on other occasions; but during the season of 1879, which was an exceptionally good one, the birds simply swarming, far larger bags were made, an officer of my regiment having bagged fifty-six couple to his own gun on one day, and fifty-four on another. But this represents good shooting; for it must not be imagined that the birds can be knocked down with a stick. Far from it, anything over twenty couple means really straight shooting and hard work, as the walking is bad and the heat intense.

A good retriever is very useful; but few dogs can stand the sun for any length of time. I used to keep mine closely clipped, except his head and a broad stripe down his back, which proved a great protection to his spine; but in spite of all precautions, after a time, he got altogether out of condition. Without a dog birds are often lost, particularly on bushy ground, though the Malay boys, sharp little urchins, with more intelligence than clothes, who follow and carry one's cartridges, are generally very good at marking down the dead and wounded; still a dog is preferable to the best of human retrievers.

Near Thaipeng, in the native state of Lârut, I was once one of a party who attempted to shoot Snipe from elephants; but I cannot advise anyone to go and do likewise, at least if their dinner depends on what they kill. It happened thus. We had been all day in the jungle after a rogue elephant, which had done considerable mischief; but he proved too much for us, and got safely away to the hills without giving anyone the slightest chance of a shot, though at one time we were close to him. In the afternoon, on our way home, we had to pass near a celebrated Snipe-ground of considerable extent, swampy, and much overgrown with low bushes. "Let's try and shoot some Snipe from our elephants' backs!" exclaimed one of our number. The novelty of the thing pleased all; so off we

started; and a queer sight it was. Five elephants advanced in line, about a hundred yards apart, each carrying two guns; while in the intervals, but a little in the rear, came several Sikhs of the military police of the district, fine tall fellows in scarlet turbans. These followed us, nominally to pick up the spoil; but, unless it takes five men to carry one Snipe, their labours were light. The Snipe were very plentiful, and for half an hour there was a tremendous banging; but I need hardly say that the result was almost nil. Personally I expended quite thirty or forty cartridges for two Snipe and a green Pigeon; all together I do not believe the ten of us averaged a bird apiece. But it was not to be wondered at; for as "scaipe! scaipe!" resounded and up went one's gun, the elephant would make a tremendous plunge, and one's shot went anywhere but towards the object aimed at; often, I expect, much nearer the head of our mahout, or some of our Sikh followers, than was at all pleasant for them. I know it would have taken a good deal to induce me to change places with the mahout, perched as he was on the neck of the elephant, with my companion and myself slung in baskets on either side of the great lumbering brute, and firing away as hard as we could. As we sat sideways in a small cane basket, with our legs dangling over the side, straight shooting was almost an impossibility: for, to say nothing of the jolting of our animal, I, on the off-side, could fire only at birds rising to my left front, and then in a very cramped position; and the man on the near side had similar difficulties to contend with. Between these two firing-points squatted the unfortunate mahout: he never made any remark, except to his charge; but I expect he offered up a prayer of thanksgiving to Mahomet when the whole performance was over and he found his head still on his shoulders.

RHYNCHÆA BENGALENSIS (Linn.).

The Painted Snipe, as it is called, though not really belonging to the true Snipe, is a bird frequently met with by the sportsman in Malaya.

The Painted Snipe *may* be a resident and breed in the Malay peninsula, as is the case in India, though my experience inclines me to think it migratory. In any case, if not a true migrant, it certainly moves about the country, only appearing in certain districts at par-

ticular seasons. I never heard of it nesting in the peninsula, and never even saw it except during the north-east monsoon, when it is fairly plentiful, frequenting the same ground as the common Pintail. I have shot Painted Snipe in the north of Pêrak during the months of January, February, and March, and found them in considerable numbers further south during October.

Out of a bag of twenty couple of Snipe shot in Province Wellesley on November 9, more than half were of the Painted species. They seem to collect in small parties; for when one is flushed two or three more are generally to be found somewhere near; but they rise with a heavy Owl-like flap, as a rule settling again within forty or fifty yards. Thus offering an easy mark, and being moreover poor eating, they are scarcely worth shooting.

The chief characteristics of the Painted Snipe are the beautiful ocellated plumage and the Curlew-like bill, curved downwards at the tip, also shorter than that of the common Snipe. The female, with the handsome chestnut throat, is larger and more brightly-coloured than the male.

GALLINAGO SCOLOPACINA (Bp.).

Compared with the Pintal species, the common European Snipe is rare in the Malay States.

LIMOSA ÆGOCEPHALA (Linn.).

Personally I did not meet with this Godwit; but Mr. DAVISON showed me a specimen caught with birdlime, at the same time as two Whimbrel, on the rocks off Changi, on the north coast of Singapore.

NUMENIUS ARQUATA (Linn.). The Curlew.

Plentiful along the coasts during the north-east monsoon. I shot a few off Changi and among the islands in the Johor Straits, but found them just as well able to take care of themselves, and just as hard to get at, as in cooler climes.

Referring to a visit I made during November to Pulau Nongsa, a small island off the south coast of Singapore, in my note-book is:—

“The tide being very low, a broad belt of coral-reef surrounded the island, affording feeding-grounds to hundreds of shore-birds of all kinds: so we landed, or rather waded ashore, in hopes of getting at the Curlew and Plover, of which we saw a great many; but, as

usual, the former were exceedingly wary, and, without giving us the ghost of a chance, made off to a distant sandbank, loudly uttering their shrill cries, as if to deride the unsuccessful sportsman and warn all other birds of his approach."

NUMENIUS PHEOPUS (Linn.). The Whimbrel.

Flocks of Whimbrel frequent the coasts during the north-east monsoon. In my notes I find:—

"Singapore, 26th November, 1879. The other day, while shooting Pigeons on Pulau Batam, we put up a large flock of Whimbrel from the belt of mangroves bordering the shore, but did not get a chance at them; but next day Mr. D.—bagged eight in two shots."

TRINGA MINUTA (Leisl.). The Little Stint.

I shot one of these Stints on Pulau Batam, near Singapore, on 25th November, 1879; it was a male in winter plumage, length about $6\frac{1}{2}$ inches; head and the upper parts whitish brown, the feathers dark-shafted; the two central tail-feathers dark brown, the others dusky, all narrowly edged with white; the underparts white, dusky on the breast; bill at front $\frac{3}{4}$ inch, tarsus $\frac{3}{4}$.

TOTANUS GLAREOLA (Linn.). The Spotted Sandpiper.

This Sandpiper is by no means a rare bird; I shot several in Pêrak and in Singapore. A female, killed at Kôta Lâma, Pêrak, on 19th April, 1877, measured 9 inches, tarsus $1\frac{1}{2}$, beak at front $1\frac{1}{4}$; legs dull green; irides dark brown; head, upper parts, and the wings dull brown, spotted with grey; a dusky streak passes from the base of the upper mandible to the eye; supercilium and underparts white, dusky on the breast and much streaked with brown; the upper tail-coverts pure white; tail barred with dark brown. A specimen shot in Singapore during November was less distinctly spotted than the above.

In my notes I find:—

"Singapore, 18th November, 1879. This afternoon, while Snipe-shooting in the Mount Echo valley, close behind our barracks, I came on a large flock of Spotted Sandpipers (*T. glareola*) feeding in the swampy fields, which are awful walking, letting one through at every step over one's knees into soft filth. The Sandpipers were rather wild, rising with shrill cries as soon as I got within forty or

fifty yards, but settling again after flying round and round for a few minutes. Feeding with them were a great many Yellow Wag-tails (*Budytes taiwanus*); and I got several specimens of both them and the Sandpipers at one shot."

TRINGOIDES HYPOLEUCOS (Linn.).

The common Sandpiper is plentiful in Singapore and the neighbouring isles; during November, 1879, I found great numbers of them on the shores of Pulau Nongsa and Pulau Batam, and on many occasions saw them settle on the fishing-stakes, which stand five or six feet above the surface of the water. In China I once saw a Sandpiper dive and swim under water with wonderful ease. I find the following notes, made at the time, in my journal:—

"6th October, 1878, Kowloon, near Hongkong. Towards evening we left the hills and returned to our boat, near which, on the sands, we shot a few Waders. One of these, a Common Sandpiper (*T. hypoleucos*), fell wounded into a brook; and my dog ran to retrieve it; but just as he was going to pick it up, it dived like a Duck and swam *under* water a distance of over twenty yards. The stream was of no width, and the water as clear as crystal; and standing within a couple of paces, I most distinctly saw the bird propelling itself with its wings as it swam beneath the surface of the water."

PARRA SINENSIS (Gm.). The Pheasant-tailed Jacana.

Late one evening in the first week in May, while shooting near Saiyong jheel, on the Pêrak river, I was stalking a flock of Teal which had gone down on some swampy ground bordering the water, when something white darted past, which, in the dark, I took to be a Goose Teal, so fired, but found that instead of a Teal I had killed a most beautiful specimen of this handsome bird, the only one I came across in the peninsula, though in India, I believe, it is far from rare.

It was a male in summer plumage; length $17\frac{1}{2}$ inches, of which the tail of four long tapering black feathers measures $5\frac{1}{2}$; irides brown; beak, legs, and toes plumbeous, the toes are very long and slender, and set like the spokes of a wheel, hind claw $1\frac{1}{8}$ inch; underparts white, barred irregularly with black; a peculiar golden mane passes along the back of the neck; the back and scapulars are brown with a bright purple gloss; wings pure white,

excepting the first primary, outer webs of second and third, and borders round the ends of the secondaries, which are black; wing-feathers very lanceolate, the first primary has at its tip a peculiar filament, the fourth is very attenuated and pointed; wing-coverts barred with grey.

PORPHYRIO CALVUS (Vieill.). The Purple Coot.

One afternoon, while Teal-shooting in Pêrak, I was wading about a jheel overgrown with weeds and aquatic plants, among which I shot a specimen, my only one, of this Coot.

Its plumage reminded me much of *Porphyrio cœruleus* of Europe; but it is smaller than that bird, also its beak and legs are not of such a bright red. It feeds principally on weeds and other green substances. The stomach of the one I shot was very muscular, and contained vegetable matter and a quantity of sand; but possibly they occasionally prey on the young of other birds, as their relation, *P. cœruleus*, which I shot in Sicily, had there the reputation of killing young wildfowl; also, when visiting Mr. WHAMPOA, a Chinese gentleman residing in Singapore, he showed me a very handsome pair of these Coots in his garden, but said he was obliged to confine them in a cage, as, when let loose, they killed his chickens.

My Pêrak specimen, a male, shot on 9th May, 1877, was 17 inches in length; neck, throat, and upper parts of the breast pale greenish blue; back of neck and the abdomen deep purple; vent freckled with grey; under tail-coverts white; wing-coverts light blue; legs, beak, and frontal plate dull red; back and scapulars dark brown tinged with green and blue. Soon after death the beautiful blue of its plumage faded.

There were two of these Purple Coots in the Botanical Gardens, Singapore, also specimens in Raffles Museum.

GALLICREX CRISTATA (Lath.). The Crested Water-cock.

This Water-fowl is very plentiful, breeding among the jheels and reedy swamps of Western Malaya. Personally I never found a nest, but in Pêrak, during April, have shot males with the red frontal plate, assumed only during the breeding-season, fully developed. The following is from my note-book:—

“Kuâla Kangsa, Pêrak, 31st March, 1877. This evening, in

a very wet paddy-swamp, I shot a bird uncommonly like a Coot (*Fulica atra*), except that its toes were very long, and without lobe, web, or any other aid to swimming; it flew with a heavy flapping flight close over the tops of the reeds. It was of black plumage, but a good deal marked with a rusty brown; also it had a little white on its shoulders; irides dark brown; length 15 inches; claws long, very curved and sharp; legs yellowish green, as was the beak, which extended up the forehead in the form of a reddish frontal plate; so I take the bird to be a young male in breeding-plumage; in the adult the iris is crimson."

Again, in my notes I find:—

"Singapore, 22nd December, 1877. To-day I got four couple of Snipe in the valley near Cluny, also shot a female specimen of the Water-cock (*G. cristata*), which Drake flushed out of a thick patch of reeds standing in water nearly two feet deep. Though at different times I have shot dozens of these birds, I never remember finding them anywhere but in very wet places; in Pêrak they were exceedingly plentiful on all the jheels, but kept to the thick reed-beds. During last spring I shot a great many on the jheels near Saiyong and Kota Lama, and found them very good eating, though in that respect not equal to the little Goose Teal.

"The great difference in size of the sexes of this bird is very noticeable: the female I shot to-day is 13 inches in length; irides dark brown; legs and beak dull green, the latter reddish at its base; head and the upper parts dark brown; the feathers of the back, also the tertiaries, broadly edged with pale brown; chin, throat, supercilia, outer web of first primary, and the shoulder white; underparts pale rufous brown, narrowly barred with dusky brown, particularly on the flanks."

The male is a larger bird, about 16 inches in length, and, when mature, has red irides and its plumage very dark.

In Singapore I once put up a Water-cock which flew a short distance, then settled on the top of some bushes eight or ten feet above the ground, a most unusual thing for one of these birds to do. It looked most strangely out of place; so I shot it in order to be sure of its identity.

ERYTHRA PHENICURA (Penn.).

The White-breasted Water-hen, though by no means rare, is not very often seen, owing to its extreme shyness; it frequents thick covert near water. At Singapore I occasionally saw it in the hedge-rows near the lake in the Botanical Gardens.

During November, 1879, I shot several specimens on Pulau Batam; also during 1877 I got many in Pêrak and Lârut. One of the Pulau Batam birds was 12 inches in length; beak yellowish green, reddish on the ridge; legs dull green; tarsus $2\frac{1}{4}$; upper plumage dull bluish black with a slight green tinge; face, throat, and breast pure white; vent and under tail-coverts chestnut. This specimen, being immature, had the irides brown: in the adult they are deep crimson. I once saw one these birds settle on the upper branches of some trees; but they were of no height, about ten or twelve feet at the outside.

PORZANA CINEREA (Vieill.). The Small Water-Rail.

I never came across this Rail on the mainland; but on Singapore, in certain localities, notably the Mount Echo valley, they were very plentiful, particularly during September and October; but perhaps being out Snipe-shooting a great deal during those months I noticed them more than at other times, when I did not pass so much time in their resorts.

My notes are as follows:—

“Singapore, 7th October, 1879. Passed the afternoon Snipe-shooting in the Mount Echo valley, wading through the swampy grass-fields knee-deep in the most horrible filth—the sewage of Singapore, which is carried out from the town in large wooden tubs by the Chinese coolies and emptied over the fields as manure. The smell is most disgusting; but the valley being capital collecting-ground, in spite of the deep wading and unsavoury odours, I frequently pay it a visit.

“To-day I got some Snipe (*Gallinago stenura*), Bitterns (*Ardetta cinnamomea*), Golden Plover (*Charadrius fulvus*) and smaller Rails (*Porzana cinerea*); these last were very plentiful in the deepest parts of the swamp, and nearly every bush held one. When flushed they flew with a weak flight, with their long legs trailing behind them, for about fifty yards, then dropped and ran

for the nearest covert, from which it was not easy to get them up a second time.

"A female I dissected had the ovaries much developed, stomach very muscular, full of grass-seeds, a fine thread-like weed, and a quantity of sand.

"Length $7\frac{1}{2}$ inches, tarsus $1\frac{1}{2}$; irides red, orbits scarlet; legs yellowish green, soles yellow; beak yellowish green, orange at its base; upper parts, the wings, and tail dull brown, with a plumbeous tinge on the head and neck; underparts, also a streak under and over the eyes, white; sides of the neck and breast bluish grey. Another I shot had the irides a reddish brown colour."

At sunset on any fine evening during September dozens of them were to be seen feeding out in the open on the swamps below Mount Echo, scuttling off in all directions directly they were disturbed.

HYPOTENIDIA STRIATA (Linn.).

This common Water-Rail is apparently more abundant in the south than in the north of the peninsula, as I did not meet with it in Pêrak, while in Singapore I found it, at all seasons, the most common of all the Rails. I got specimens every day I went Snipe-shooting, their favourite resorts being very wet swamps covered with low bushes.

A female I shot on Pulau Batam, on 30th September, 1879, was 10 inches in length, tarsus $1\frac{3}{4}$; irides dark brown; beak fleshy red, dusky on culmen and tip; legs dull green. Its stomach contained a quantity of dark-green substance, among which I detected the fragments of insects and the shelly covering of a chrysalis of some sort.

Another female, shot in Singapore 30 September, 1877, was slightly smaller than the above, in other respects similar. Top of head, the nape, and a streak down each side of the neck chestnut, marked with black on the crown; the wings and upper parts olive-brown, covered with narrow wavy bars of white, edged with black; the chin and throat dull white; a streak below the eye, the sides of the neck, and the breast lead-grey; abdomen, dull brownish grey barred, particularly on the flanks, with white.

RALLINA FASCIATA (Raffles.).

This handsome Banded Rail is decidedly rare; I never shot one, and saw very few in the Malacca collections. It can easily be identified by its richly banded plumage. It is smaller, also has the olive of the back more rufous than *Porzana ceylonica*.

LEPTOPTILUS ARGALA (Lath.).

The well-known Adjutant bird of Anglo-Indians is found along the Malayan coasts, but, I think, not so plentifully as the rather smaller and more darkly plumaged *L. javanicus*.

In August, 1877, I saw several Adjutants on the mud at the mouth of the Moar river.

LEPTOPTILUS JAVANICUS (Horsf.). The Malay Adjutant.

Much more common in the Straits than the last-named species: both, however, there go by the name of "Adjutant bird." I found it plentiful on the mud-flats at the mouths of most of the rivers on the west coast particularly, about the bar at the entrance to the Lârut river; but I never shot one, as on every occasion my baggage was much too limited to allow room for stowing away so bulky a bird.

It is easily tamed, and invaluable as a scavenger, particularly in a hot climate, where things do not improve by being kept. When quartered at Tanglin, every time I drove into Singapore I passed a pair of these Adjutants, which lived on the grass-plot at the roadside close to the town. They seemed very contented with their lot, never straying far away from one place, and were usually to be seen either perched on a railing, apparently buried in thought, or else gravely stalking along the edge of a tidal ditch bordering the road, on the look-out for frogs, fish, or pieces of offal that might come drifting down the stream. My dog frequently used to rush and bark at them, when they put themselves into the most absurd attitudes, if very closely assailed bending forwards with their wings upraised, necks extended, and enormous bills wide open, presenting a most grotesque appearance.

The detachment of my regiment stationed at Penang bought a pair of these Adjutants from a Malay, and kept them on the race-course just outside the Mess. The following account of the birds, their manners and customs, is given me by an officer of the

detachment, who watched them daily :—

“In June, 1877, when at Penang, S. S., B— purchased, for the sum of three or four dollars, two Adjutant birds of a black and white colour; head and bill of a yellowish colour, as was also the neck; their bills were nearly a foot in length; they possessed but very few feathers on the head and neck—in fact only a few sprouting hairs: their backs and wings were of a greenish black, and their breasts of a dirty white colour. The birds stood about three feet in height.

“They were never kept in confinement, and from the very first were allowed to roam over a large open expanse of ground, but never seem inclined to stray far, and very seldom even attempted to fly; and when they did it was rather a failure, and consisted of a succession of bounds for about fifty yards, after which they appeared to be quite exhausted.

“They were curious birds to watch, and always gave one the idea that the surroundings had but little attraction for them, as they would spend more than half the day standing motionless opposite each other, bill to bill, and with both wings outspread, forming a most ludicrous picture; sometimes they would stand like this for an hour or more; but occasionally one of them raised and stretched out one of its legs as if it were stiff; otherwise they would scarcely move a muscle. I do not remember ever hearing either of them utter a sound, though we often listened.

“They were very coarse feeders, and did not consider much before they fed, either as regards quality or quantity. On one occasion I threw to one of them, as fast as I could, one by one, several small fish about six inches in length; these he gulped down to the number of thirty-two, and even then did not appear satisfied.

“After they had been with us about a month, one morning one of them looked rather sorry for itself, and basked in the sun with outspread wings for several hours; but later in the day he lay down on the grass with his eyes closed, evidently very sick; by him stood his brother, quite unconcerned, and, as it seemed to us (for we watched him closely), unaware of anything unusual

being the matter. They remained like this till late in the afternoon, when we saw the healthy bird put his head on one side, and, looking inquisitively at his sick comrade, proceed to stir him up with his back, but without making him move; and on going out we found him to be dead. To discover the cause of death a post-mortem was decided on; and B—— and myself set to work at once, and found in the bird's stomach, which was much inflamed, the legs and claws of a large Fowl, quite undigested, and probably the cause of its decease.

“The amusing part of the post-mortem was that the surviving bird stood close by to see us cut up his brother, and evidently with much pleasure; for he eagerly watched us slice off great lumps of meat, and was delighted when they were thrown to him, gobbling them up in no time; after a good meal he stalked away, very well satisfied with the afternoon's performance, apparently thinking what a pity it was he had not a brother dying every day.”

ARDEA SUMATRANA. The Malay Purple Heron.

Plentiful in the jheels and paddy-swamps in Pêrak, particularly during April, when I found them in a great numbers among the reeds of the large jheel near Saiyong; as I waded about I used to see them, with their long necks stretched out and heads raised above the reeds, most intently watching my movements.

They were rather wary, though when flushed they generally flew but a short distance, and settled on the upper branches of some large trees bordering the jheel; then, under cover of the jungle, they were easily stalked. They reminded me much of *A. purpurea*, the European Purple Heron, except that they were not nearly so richly coloured as that bird. An immature female, which I shot at Kota Lama jheel, Pêrak, on 5th April, 1877, measured about thirty-six inches in length, bill at front $4\frac{3}{4}$, tarsus 5; crown of head dull bluish grey; chin and throat white; face and neck rufous brown, the latter spotted longitudinally with dark brown; upper parts dull brown, the feathers edged with rufous brown and slightly glossed with purple and green; tail and wing slate-grey; wing-coverts ashy, with pale rufous edges to the feathers; abdomen yellowish white. It had been feeding

on small fishes.

HERODIAS GARZETTA (Linn.).

I frequently met with this Egret among the swamps in Singapore, generally in flocks of from fifteen to thirty.

My notes record:—

“Singapore, 21st October, 1880. To-day, while shooting Snipe in the swamp behind the barracks, I put up a party of twenty white Egrets, and, as they passed overhead, brought down one of them, a fine specimen of *H. garzetta*, in pure with plumage, but of course, at this time of the year, without the crest and the dorsal and pectoral plumes of the breeding-season.

“In length it is 24 inches, bill at front $3\frac{1}{8}$, tarsus 4; legs black, blotched with green; toes green; soles yellow.”

BUPHUS COROMANDUS (Bodd.).

The Cattle-Egret is very plentiful throughout the Malay Peninsula; the following are some of the many references to it in my note-book:—

“Kuâla Kangsa, Pêrak, 17th February, 1877. Buff-backed Herons are very common here; wherever there are many buffaloes large flocks of them are always to be seen, either walking about among the animals' legs, or else perched on their backs picking out ticks and other vermin. This afternoon, close to Kôta Lama, I shot a female specimen: length $19\frac{1}{2}$ inches, beak at front $2\frac{1}{4}$, tarsus $3\frac{1}{2}$; plumage white, with the exception of a faint buff tinge on the head and nape; irides yellow; legs black; beak reddish yellow; in short, the bird was in almost perfect non-breeding plumage, though another, which I shot out of the same flock shows traces of the buff back. Every evening at dusk a large flock of these Egrets fly across the river and roost in a clump of trees exactly opposite our camp.”

“Singapore, 4th November, 1880. Leaving Tanglin directly after tiffin, I followed a jungle-path for a mile or two till it brought me out on an open swamp, a branch of the Mount Echo valley. Quietly parting the bushes, I looked out into the open, and found myself quite close to a large flock of Cattle-Egrets, which, unaware of my presence, were stalking about the swamp picking up larvæ and aquatic insects. After watching them for several

minutes, I stepped out from my hiding-place and, as they rose, brought down a couple. The birds were so confused at my suddenly and so unexpectedly appearing almost in their midst, that they flapped about in all directions, not knowing which way to go, and gave me easy shots. One, struck by a single pellet, which grazed the top of its head, seemed to be completely dazed, and, though in other respects untouched, made no attempt to fly away nor even to walk, but stood bolt upright, quite motionless, and stared vacantly at me in a most idiotic manner: I suppose it was suffering from concussion of the brain.

“Both of the birds I shot were in pure white plumage, except a slight tinge of buff on the head; the beak was orange, at front $2\frac{1}{4}$ inches; orbital skin greenish yellow; irides yellow; legs black tinged with green; soles green; tarsus $3\frac{5}{12}$ inches. Their stomachs contained large spiders, several grasshoppers, dragon-flies, and small insects.”

“Kuâla Kangsa, Pêrak, 8th April, 1877. To-day I shot in the country round Saiyong, and on the large jheel saw several Herons (*Ardea sumatrana*); a few Teal, and literally hundreds of Cattle-Egrets; the last are becoming of a ruddy brown colour on the head, neck and breast, a sure sign of the approach of the breeding-season.”

BUTORIDES JAVANICUS (Horsf.).

Common. I got several in Pêrak. For many weeks one resorted daily to the river-bank just below our camp at Kuâla Kangsa, and I often watched it fishing; at length, doubtless thinking itself in a dangerous neighbourhood, it took itself off to other grounds.

I also found this species plentiful among the islands of the Singapore archipelago. In my notes, in a description of a trip to Pulau Mongsa, is the following:—

“23rd September, 1880.....I found Pulau Mongsa to be about half a mile long by less than a hundred yards wide, thickly wooded, but fringed with a broad coral reef, at low tide of considerable width. Near its shores were long rows of fishing-stakes projecting some feet out of the water, on which sat hundreds of small green Herons (*Butorides javanicus*). On our

approach they rose in regular flocks ; and, so as to be certain what they were, I shot three or four. They flew very close to the surface of the water."

ARDETTA FLAVICOLLIS (Lath.). The Black Bittern.

Personally I never shot this handsome Bittern in the Malay States ; but I saw skins in Malacca collections. I killed one or two in the neighbourhood of the Canton river, South China, where I found them in thick reeds and not easily flushed.

ARDETTA CINNAMOMEA (Gm.). The Chestnut Bittern.

I found this small Chestnut Bittern plentiful in Singapore, and also on the mainland, and shot many specimens in Pêrak, Lârut, Province Wellesley, and Malacca, generally flushing them in paddy-fields.

A female, which I shot at Singapore on 30th September, 1877, was about 14 inches in length, bill at front $1\frac{1}{2}$; tarsus $1\frac{3}{4}$; irides yellow ; bill pale greenish yellow, dusky on the ridge ; soles pale yellow ; upper parts and the tail ruddy chestnut, but much variegated, many of the feathers of the wing-coverts and back being brown with pale yellowish margins ; top of head dusky ; chin whitish ; pectoral gorget of ruddy yellowish-brown feathers with dark brown central streaks ; under-surface of the wings ash-grey with a delicate pink tinge.

Undoubtedly this was a young bird, being of such mottled plumage ; moreover it was of much smaller dimensions than an adult, at least according to JERDON'S description.

Another specimen, which I shot during May in the neighbourhood of Kuâla Kangsa, Pêrak, was of an almost uniform chestnut colour as regards its upper parts, but brightest on the wings and tail, and becoming brown on the back ; the top of the head had a dusky tinge ; underparts yellowish white ; pectoral gorget boldly marked with longitudinal reddish-brown streaks ; under-surface of the wings delicate pink-grey ; bill at front 2 inches, in colour, yellow, the ridge dusky ; legs greenish yellow ; irides bright yellow, orbital region green.

ARDETTA SINENSIS (Gm.).

Certainly not so common as *A. cinnamomea*, still by no means rare in reedy swamps and wet paddy-fields. It is easily distin-

guished from *A. cinnamomea* by its wing-quills and tail being deep blue-black instead of chestnut.

One which I shot at Singapore on 12th November, 1880, measured 15 inches in length; tarsus $1\frac{3}{4}$; irides yellow; legs and beak pale yellowish-green, the latter dusky on its ridge; beak front $2\frac{1}{4}$ inches.

Another, from Kôta Lama, Pêrak, 22nd March, 1877, was of similar dimensions; top of head, the wing-quills, and tail black; face and the upper parts cinnamon-red, brightest on the back of the neck; wing-coverts pale yellowish brown; underparts pale yellowish white.

GOISAKIUS MELANOLOPHUS (Raffles). The Tiger Bittern.

I only once met with this magnificent Bittern, getting a single specimen, a female, near Changi, Singapore.

Length about 20 inches, beak at front 2, tarsus $2\frac{7}{8}$; top of head and pointed crest, passing over the nape, bluish-black; tail brownish-black; rest of the plumage chestnut, brightest on the face and sides of neck; the back and wing-coverts freckled with wavy black lines; pectoral plumes creamy brown, dashed with black and chestnut streaks; the abdomen and vent chestnut, richly marked with irregular black and white bars; under tail-coverts white irregularly marked with dark brown; wing-quills bluish-black, the terminal portions chestnut, and the extreme tips whitish.

DENDROCYGNA JAVANICA (Sykes.). The Whistling Teal.

This bird may be called the Duck of the Malayan Peninsula.

Though a migrant, it is found at certain seasons throughout all the Malay States; and I do not believe its breeding-grounds can be far north of lat. 5° N., as the migration from the lower or southern half of the peninsula does not take place until late in June, and a few months later the birds are back again. During the winter months, or, to speak more correctly, during the north-east monsoon, these Ducks collect in large flocks on the wheels and flooded paddy-fields. In Pêrak I found them particularly partial to small weedy lakes surrounded by thick jungle; and at one of these, near Saiyong, I used to see them literally in hundreds from February to April; but towards the end of the follow-

ing month they got very restless, and by the middle of June most of them had disappeared, probably having gone north to breed.

I think there is little doubt that some few remain to nest near the banks of the Pêrak river, in the vicinity of Kuâla Kangsa, as at the end of June, after the main body had left, I occasionally came across stragglers in the ruddy breeding plumage. Moreover, Mr. HUGH Low, H.B.M.'s Resident at Pêrak, told me that the natives brought into Kuâla Kangsa young birds but a few weeks old, assuring him that they had been caught in the neighbourhood. This happened in January or February; so I suppose the birds breed from August or September till early in the year—that is, during the rainy season.

One cannot base conclusions on the habits of semidomesticated individuals; but it is worthy of notice that several of these Whistling Teal which, a few years ago, were turned out with clipped wings on the artificial lake in the Botanical Gardens at Singapore, though, having perfectly recovered their wings, they daily fly about the islands in search of food, still do not migrate, but remain and breed, and during September I saw several young ones swimming about with their parents. There is but little, if any, difference in the plumage of the sexes, and very slight seasonal change, though towards July specimens I shot were certainly more ruddy than earlier in the year.

During the heat of the day the Whistling Teal keep principally on the jheels, among thick reeds, and seem particularly fond of the small open pieces of water shut in by high rushes which are found in all large reed-beds. This makes them fairly easy to get at; and on several occasions, by wading quietly through the water, waist deep, the reeds concealing my head and shoulders, I came on them unawares and killed several at a shot—a great addition to one's larder in a country where fresh meat was not to be got every day.

When on open water I found them by no means easy to stalk; and even in places where I much doubt if a gun had ever been fired and they were but little disturbed, after one or two afternoon's shooting they became exceedingly wild and difficult to get near. The Malay bird can be easily distinguished from the other

species of *Dendrocygna* by its small size; out of the dozens which I shot at different times I do not think one ever exceeded 17 inches in length.

A male shot at Kôta Lama, Pêrak, on 17th February, 1877, was 16 inches in length; irides dark brown, orbits bright yellow; legs and beak bluish-black; head and neck dull brown, the former dark on the crown; chin whitish; underparts ruddy brown, except the vent and under tail-coverts, which were whitish; wings black; lesser coverts and the upper tail-coverts rich chestnut; back dusky black, each feather terminating with a broad band of rusty brown.

NETTAPUS COROMANDELIANUS (Gm.). The White-bodied Goose Teal.

The beautiful, and most appropriately named, little Goose-Teal is exceedingly plentiful among the jheels and swamps of the mainland; but I never met with it on Singapore or any of the islands along the coast. In many respects it is very Anserine, whence its name, having the short high bill, pure white colouring, and hoarse cry of the Goose tribe.

The Goose Teal is generally found in small parties of from four to ten, often associating with the Whistling Teal; and I have on several occasions got specimens of both species at one shot.

They seem to prefer open sheets of shallow water to thick cover, but on being disturbed become very shy and retire to quiet creeks or back waters surrounded by jungle. Though I often found them on flooded meadows, I rarely (in fact do not think I ever) saw them actually on dry land. Their legs are so short and set so far back that probably they seldom attempt to walk, but on the water are quite at home swimming and diving exceedingly well, and when slightly wounded are very hard to secure.

I remember once trying, for nearly half an hour to catch a Goose Teal which fell winged into a shallow pool. It stayed under water a marvellous length of time at each dive, and when it did rise to the surface showed only its head, disappearing again the instant I moved; but at length I tired it out and consigned it to the bag. These birds also have the power of sinking their bodies below the water till nothing but their head is visible, hoping thus to escape notice.

One evening in Pêrak, while out bird-hunting, I came upon a small pool completely excluded from the outer world by the most luxuriantly growing jungle. From the overhanging trees long slender creepers hung down in tangled masses to the surface of the water, which was almost covered with aquatic plants. To complete this beautiful piece of jungle-scenery, in the centre of the pool was a Goose Teal, perfectly motionless; for, quietly as I had approached, it had heard me, and, thinking it was unobserved, did not rise, but, all the time intently watching my movements, slowly and noiselessly sank under the water till nothing but its head remained above the surface.

When on the wing, the flight of these birds is very rapid. Skimming close over the reeds, they dodge along at use of a great pace, and are far from easy to shoot.

They breed in holes in trees, laying several white eggs. I was unable to find a nest, but think they breed in the north of the Malay Peninsula, as near Kuâla Kangsa I noticed that during June they paired, and, leaving the open water, retired to out-of-the-way places in the jungle, often selecting the narrow creeks or inlets from a large jheel.

Concerning the mode in which these birds, Cotton-Teal as they are called in India, carry their young down from their nests to the water, I had the following related to me by an eye-witness, an officer in the Indian Civil Service. He was stationed on the Madras coast; but I forget the exact name of the place. Anyhow, one afternoon, late in June, while out riding he saw a Cotton-Teal leave a tree and fly down to a pool of water which was near; the bird's peculiar flight, slow and steady, so different from their usual rapid mode of progression, attracted his attention; and riding closer, he saw it had something resting on its back which, on its reaching the water, proved to be three or four young Teal.

My informant then sent his native servant up the tree from which the bird flew; and at about twenty feet from the ground he found the nest, containing several more young birds, which he brought down; and my friend took them home, hoping to rear them in his poultry-yard; but in a short time they sickened and died.

Specimens shot in Pêrak during May had their legs black, but much

tinged with yellowish-green, which is the case, I believe, only during the breeding season. The difference between the plumages of the sexes is very marked, the female being of much duller colours than the male.

The following specimens I shot in Pêrak during April, 1877:—

Male. Length $12\frac{1}{2}$ to 13 inches; irides crimson; legs and feet greenish-yellow tinged with black; webs black; face, neck and whole of the underparts pure glossy white; a deep black ring encircles the neck; top of head dark brown; back and wings beautiful metallic green with a rich purple tinge; primaries barred, and the secondaries tipped with white, thus forming a band across the wing; flanks and tail-coverts vermiculated with grey lines, like a Wigeon's back; tail greenish brown; vent black.

The *female* is of the same size as the male, but not nearly so boldly marked; its irides are dark brown; bill yellowish black; the secondaries only are marked with white; face and neck grey; breast barred with narrow black lines; underparts dirty white; top of head dull brown, with a purple gloss.

I dissected both these birds: their stomachs were exceedingly muscular, contained weed and vegetable matter, also a quantity of sand and particles of quartz.

STERNA BERGII (Licht.).

I shot several of these Terns in the Straits of Johor and off the south coast of Singapore. During September, while steaming to Pulau Mongsá, several flocks passed close to our launch. They flew close to the surface of the sea and in extended order, like a line of skirmishers; all the flocks were making in the same direction; and it was about three in the afternoon: so perhaps they were on their way to some place in which to pass the night.

One shot near Johor on 13th April was from 17 to 18 inches in length, bill at front $2\frac{1}{4}$, tarsus $1\frac{1}{2}$; irides dark brown; bill pale yellowish-green; legs black; upper parts mottled all over with French grey and dusky brown; head and nape black, the feathers of the crown edged with white; forehead, underparts, inner portions of the inner webs of the primaries, and tail-feathers white.

I think this must have been an immature bird; others I shot

had the legs green, blotched with black.

STERNA SEENA (Sykes.).

During May, 1879, I got one of these Terns alive, it having been caught by a fisherman on the shore near Malacca. It was a female, length 16 to 17 inches, bill at front $2\frac{1}{2}$, tarsus 1, bill from gape 3; in colour bright yellow; irides dark brown; head and pointed crest over the nape deep blue-black; the cheeks, a band across the upper parts of the back, and all the underparts white, slightly dusky on the breast; upper parts delicate French grey, very silvery on the wings; inner portions of the inner webs of wing-quills white; tail very deeply forked.

I got other specimens near Singapore during September and October.

STERNA SUMATRANA (Raffl.). The Black-naped Tern.

Common among the islands at the south of the peninsula. A specimen shot in the Johor Strait late in September was a male, length $13\frac{1}{2}$ inches, beak at front $1\frac{1}{2}$; irides dark brown; beak and legs black; tail very long and forked, the two outer feathers projecting $1\frac{1}{2}$ inch beyond the others; top of head, also the face, silvery white; a black streak passes from the beak through the eye and enlarges into a broad patch on the nape; upper parts, tail, and wings pale French grey; outer web of first primary black; underparts glossy white delicately tinged with a most beautiful rosy hue. Its stomach contained small fishes.

SULA AUSTRALIS (?).

In June, 1877, I saw several Gannets sitting on some drifting tree-trunks a few miles out to sea off the mouth of the Pêrak river.

ATTAGEN MINOR (Gm.). The Frigate-bird.

On 23rd September, 1880, I got an immature Frigate-bird on Pulau Nongsa, about ten miles off the south coast of Singapore; I believe it to be the only specimen recorded as having been obtained in the Straits.

With some friends I was shooting green Pigeons as they came at dusk to roost on the island. Shortly after sunset, while waiting for the Pigeons, we saw a large bird flying towards the shore, and sailing along close over the surface of the sea. As

it passed near one of our party, he brought it down. Length about 30 inches; beak and gullet pale bluish-white; feet webbed and of a dull fleshy-white; head, neck, and throat white, mottled with umber-brown, becoming dark brown on the breast and back; belly pure white; wings and tail black, tinged with green; wing-coverts brown, the feathers having whitish margins; middle claw pectinated. The bird had a very rank fishy smell.

GRACULUS CARBO (Linn.). The Common Cormorant.

On 29th May, 1877, while returning down stream to Kuâla Kangsa, after a few days' shooting on the upper reaches of the Pêrak river, I shot what I believed to be a specimen of the Common Cormorant.

In my notes I have written:—

“Soon after daylight, as we were drifting with the stream past the village of Enggar, loud exclamations from my Malay boatmen drew my attention to two large birds which were walking about side by side on the sandbank in the middle of the river. Steering within shot, I fired from beneath the attap roof covering the canoe and killed one of them, and, wading to the bank, found I had got a fine Cormorant, the first I have seen in this part of the country. It was not quite dead when I reached it, and whilst flapping about on the sand disgorged four or five small fishes. It was a female, length 34 inches, tarsus $2\frac{1}{4}$, middle toe with claw $3\frac{1}{2}$; irides pale green; beak at front $2\frac{7}{12}$, in colour dirty white, black on the ridge; gular pouch bright yellow; head, back of neck, wings, back, and tail rich bronze slightly tinged with green, and having the feathers of the upper part of the back, also the scapulars and the wing-coverts, edged with black; lower back and sides of abdomen uniform dark greenish-bronze colour; face, front of neck, breast, and middle of the abdomen white, much mottled and streaked with brownish-black.

PLOTUS MELANOGASTER (Gm.). The Indian Snake-bird.

I got one of these curious birds, looking like a cross between a Heron and a Cormorant, at Malacca; it was shot in April, out of a party of ten or fifteen, on some pools at Kessang, a marshy district in the neighbourhood of the settlement. The local bird-collectors did not seem to be familiar with it: so probably it is

rare in that part of the country; but further north, in Pêrak, I met with it on several occasions, though I never saw more than two or three together. Its chief characteristics are the long snake-like neck and the beautifully marked black and silver scapulars.

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